

WHAT IS CLAIMED IS:

- 1 1. A prepreg for fiber reinforced plastic, which comprises a matrix resin
2 composition containing a bifunctional isocyanate and/or a trifunctional
3 isocyanate, a polyol and a bifunctional chain extender having two
4 active hydrogen groups at a molar ratio, as a functional group, of
5 isocyanate : polyol : chain extender = 5.0 to 1.0 : 1.0 : 4.0 to 0; and a
6 fibrous material.
- 1 2. A prepreg for fiber reinforced plastic, which comprises a matrix resin
2 composition containing a bifunctional isocyanate and/or a trifunctional
3 isocyanate and a polyol at a molar ratio, as a functional group, of liquid
4 isocyanate : polyol = 0.9 to 1.1:1.0; and a fibrous material.
- 1 3. A prepreg for fiber reinforced plastic according to claim 2, wherein the
2 polyol has an average molecular weight of from 100 to 550.
- 1 4. A prepreg for fiber reinforced plastic according to claim 1, wherein the
2 polyol contains at least 50 wt.% of polypropylene glycol.
- 1 5. A prepreg for fiber reinforced plastic according to claim 2, wherein
2 the polyol contains at least 50 wt.% of polypropylene glycol.
- 1 6. A prepreg for fiber reinforced plastic according to claim 3, wherein the
2 polyol contains at least 50 wt.% of polypropylene glycol.
- 1 7. A production process of a prepreg for fiber reinforced plastic, which
2 comprises impregnating a fibrous material with a matrix resin
3 composition containing a bifunctional isocyanate and/or a trifunctional
4 isocyanate, a polyol and a bifunctional chain extender having two
5 active hydrogen groups at a molar ratio, as a functional group, of
6 isocyanate : polyol : chain extender = 5.0 to 1.0 : 1.0 : 4.0 to 0.

- 1 8. A production process of a prepreg for fiber reinforced plastic, which
2 comprises impregnating a fibrous material with a matrix resin
3 composition containing a bifunctional isocyanate and/or a trifunctional
4 isocyanate and a polyol at a molar ratio, as a functional group, of liquid
5 isocyanate : polyol = 0.9 to 1.1 :1.0; and a fibrous material.
- 1 9. A production process according to claim 8, wherein the polyol has an
2 average molecular weight of from 100 to 550.
- 1 10. A production process according to claim 7, wherein the polyol contains
2 at least 50 wt.% of polypropylene glycol.
- 1 11. A production process according to claim 8, wherein the polyol contains
2 at least 50 wt.% of polypropylene glycol.
- 1 12. A production process according to claim 9, wherein the polyol contains
2 at least 50 wt.% of polypropylene glycol.
- 1 13. A production process according to claim 7, further comprising, after
2 the impregnation with the matrix resin, semi-curing the thus
3 impregnated resin.
- 1 14. A production process according to claim 8, further comprising, after
2 the impregnation with the matrix resin, semi-curing the thus
3 impregnated resin
- 1 15. A production process according to claim 9, further comprising, after
2 the impregnation with the matrix resin, semi-curing the thus
3 impregnated resin.
- 1 16. A production process according to claim 10, further comprising, after
2 the impregnation with the matrix resin, semi-curing the thus
3 impregnated resin.

- 1 17. A production process according to claim 11, further comprising, after
2 the impregnation with the matrix resin, semi-curing the thus
3 impregnated resin.
- 1 18. A production process according to claim 12, further comprising, after
2 the impregnation with the matrix resin, semi-curing the thus
3 impregnated resin.
- 1 19. A production process according to claim 13, wherein the semi-curing
2 is performed by keeping the temperature of the matrix resin during
3 curing at a temperature lower by at least 10°C than the curing
4 temperature thereof.
- 1 20. A production process according to claim 14, wherein the semi-curing
2 is performed by keeping the temperature of the matrix resin during
3 curing at a temperature lower by at least 10°C than the curing
4 temperature thereof.
- 1 21. A production process according to claim 15, wherein the semi-curing
2 is performed by keeping the temperature of the matrix resin during
3 curing at a temperature lower by at least 10°C than the curing
4 temperature thereof.
- 1 22. A production process according to claim 16, wherein the semi-curing
2 is performed by keeping the temperature of the matrix resin during
3 curing at a temperature lower by at least 10°C than the curing
4 temperature thereof.
- 1 23. A production process according to claim 17, wherein the semi-curing
2 is performed by keeping the temperature of the matrix resin during
3 curing at a temperature lower by at least 10°C than the curing
4 temperature thereof.

- 1 24. A production process according to claim 18, wherein the semi-curing
2 is performed by keeping the temperature of the matrix resin during
3 curing at a temperature lower by at least 10°C than the curing
4 temperature thereof.
- 1 25. A production process according to claim 7, which is performed under
2 vacuum or reduced pressure.
- 1 26. A production process according to claim 8, which is performed under
2 vacuum or reduced pressure.
- 1 27. A production process according to claim 9, which is performed under
2 vacuum or reduced pressure.
- 1 28. A production process according to claim 10, which is performed under
2 vacuum or reduced pressure.
- 1 29. A production process according to claim 11, which is performed under
2 vacuum or reduced pressure.
- 1 30. A production process according to claim 12, which is performed under
2 vacuum or reduced pressure.
- 1 31. A production process according to claim 13, which is performed under
2 vacuum or reduced pressure.
- 1 32. A production process according to claim 14, which is performed under
2 vacuum or reduced pressure.
- 1 33. A production process according to claim 15, which is performed under
2 vacuum or reduced pressure.
- 1 34. A production process according to claim 16, which is performed under
2 vacuum or reduced pressure.

- 1 35. A production process according to claim 17, which is performed under
2 vacuum or reduced pressure.
- 1 36. A production process according to claim 18, which is performed under
2 vacuum or reduced pressure.
- 1 37. A production process according to claim 19, which is performed under
2 vacuum or reduced pressure.
- 1 38. A production process according to claim 20, which is performed under
2 vacuum or reduced pressure.
- 1 39. A production process according to claim 21, which is performed under
2 vacuum or reduced pressure.
- 1 40. A production process according to claim 22, which is performed under
2 vacuum or reduced pressure.
- 1 41. A production process according to claim 23, which is performed under
2 vacuum or reduced pressure.
- 1 42. A production process according to claim 24, which is performed under
2 vacuum or reduced pressure.
- 1 43. Fiber reinforced plastic obtained by curing a prepreg for fiber
2 reinforced plastic as claimed in claim 1.
- 1 44. Fiber reinforced plastic obtained by curing a prepreg for fiber
2 reinforced plastic as claimed in claim 2.
- 1 45. Fiber reinforced plastic obtained by curing a prepreg for fiber
2 reinforced plastic as claimed in claim 3.
- 1 46. Fiber reinforced plastic obtained by curing a prepreg for fiber
2 reinforced plastic as claimed in claim 4.

- 1 47. Fiber reinforced plastic obtained by curing a prepreg for fiber
2 reinforced plastic as claimed in claim 5.
- 1 48. Fiber reinforced plastic obtained by curing a prepreg for fiber
2 reinforced plastic as claimed in claim 6.